

1. A method of providing one of a plurality of schedulers for a multitasking system for a processor, comprising:

choosing a particular one of the schedulers;

setting a program counter to an address corresponding to code of the particular one of the schedulers; and

the processor executing code at an address corresponding to the program counter.

2. A method, according to claim 1, further comprising:

setting a stack pointer to an address corresponding to stack space for the particular one of the schedulers; and

the processor using the stack space at the stack pointer after executing code at the address corresponding to the program counter.

3. A method, according to claim 1, wherein all of the schedulers use the same stack.

4. A method, according to claim 1, wherein choosing a particular one of the schedulers is based on parameters that vary according to run time conditions.

5. A method, according to claim 4, wherein at least one of the schedulers is for statistical code profiling.

6. A method, according to claim 4, wherein a first one of the schedulers is for start up conditions and a second one of the schedulers is for steady state operation.

7. A method, according to claim 1, wherein swapping in one of the plurality of schedulers is performed by setting up a return from an exception that causes the one scheduler to execute.

8. A method, according to claim 1, wherein setting a program counter includes modifying a variable that is modified according to the particular one of the schedulers that is chosen.

9. A method of scheduling tasks in a multitasking operating system, comprising:

choosing a particular one of a plurality of schedulers; and

running the particular scheduler to schedule tasks.

10. A method, according to claim 9, wherein choosing a particular one of the plurality of schedulers is performed by setting up a return from an exception that causes that causes the one scheduler to execute.

11. A method, according to claim 9, wherein running the particular one of the schedulers includes setting a program counter to an address corresponding to code of the particular one of the schedulers.

12. A method, according to claim 11, wherein setting a program counter includes modifying a variable that is modified according to the particular one of the schedulers that is chosen.

the processor using the stack space at the stack pointer after executing code at the address corresponding to the program counter.

15. A method, according to claim 9, wherein choosing a particular one of the schedulers is based on parameters that vary according to run time conditions.

16. A method, according to claim 15, wherein at least one of the schedulers is for statistical code profiling.

17. A method, according to claim 15, wherein a first one of the schedulers is for start up conditions and a second one of the schedulers is for steady state operation.